

# **STATUS OF THE NORTHERN PIKE FISHERY**



**ILLINOIS DEPARTMENT OF  
NATURAL RESOURCES**

**DIVISION OF FISHERIES**

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## **STATUS OF NORTHERN PIKE FISHERY IN ILLINOIS REGION 1**

### **DISTRICT 1: JO DAVIESS, STEPHENSON, WINNEBAGO, BOONE, DEKALB, OGLE, AND CARROLL COUNTIES**

In addition to the muskie waters of Pierce Lake and Shabbona Lake, there are several quality northern pike lakes in northwest Illinois.

Lake Le-Aqua-Na has a strong pike population estimated to be near 5 per acre of pike ranging in size up to 38" at 13 pounds.

Four Lakes in Winnebago County has strong numbers of pike with one of them of newspaper quality size. Olson Lake has been stocked on a yearly basis but many of the stocked pike escape downstream to Pierce Lake where, in addition to muskie, a self-created pike fishery occurs.

Developing pike fisheries can be found in Lake Victoria at South Beloit and Levings Lake in Rockford. Spencer Lake in the Boone County Conservation District in Belvidere has an excellent pike population but anglers can only access the lake after a long hike.

### **DISTRICT 2: ROCK ISLAND, HENRY, BUREAU, LEE, LASALLE, AND WHITESIDE COUNTIES**

**JOHNSON SAUK TRAIL LAKE** - This lake is a very fertile 58 acre lake in Henry County. The lake has a maximum depth of 23 feet and an average depth of 8.2 feet. Dense vegetation had plagued this lake until the introduction of 115 triploid grass carp in 1990. The results were excellent in 1991 and 1992 until late fall when Eurasian milfoil started to establish itself. The lake was first stocked with northern pike in 1989. The lake was stocked annually with 8 inch northern pike at 1 to 3 per acre. In 2000, we started stocking muskie instead of northern pike. The 14 inch northern pike fingerlings stocked in 1992 were purchased by the Kewanee Wethersfield Sportsman's Club.

The lake developed a fairly good northern pike population. In 1997, 12 trapnets set overnight resulted in the collection of 9 northern pike between 17 and 36 inches. In 1998, 12 trapnets resulted in the collection of 11 northern pike between 22 and 37 inches. In 1999, 12 trapnets set overnight resulted in the collection of 11 northern pike between 20 and 38 inches. In 2000, 12 trapnets resulted in the collection of 12 northern pike between 19 and 38 inches. In 2001, 10 trapnets resulted in the collection of 23 northern greater than 19 inches. The lake has a good muskie population. Six trap nets set in 2008 resulted in the collection of 11 muskie. The largest was greater than 40 inches. All were greater than 32 inches. The lake should provide a few large northern pike in 2009 but few northern pike remain.

Johnson Sauk Trail Lake has the statewide regulation of 3 fish daily creel limit with a 24 inch minimum. The Lake was switched to a muskie stocking program in 2000. The lake also received a stocking of 58 muskellunge in 1988. One of these muskies collected in 2002 weighed over 40 pounds. A 48 inch muskie was caught by an angler in October of 2003.

#### **DISTRICT 4: PEORIA, FULTON, AND STARK COUNTIES**

**BANNER MARSH** - Northern pike had been consistently stocked in Johnson Lake from 1988 to 2000. In 2008, 2 northern pike were sampled from 25 to 29 inches in length. In 2009, a very low density, northern pike population will be available in Johnson Lake.

Johnson Lake is approximately 600 acres and is composed of a maze of deep strip mine water connected to shallow flats of flooded trees. The lake's major fish species are largemouth bass, bluegill, white and black crappie, walleye, muskie, channel catfish, northern pike, carp, and gizzard shad. There is a 25 hp limit at Banner Marsh.

#### **DISTRICT 5: MARSHALL, PUTNAM, TAZEVELL, AND WOODFORD COUNTIES**

**SPRING LAKE SOUTH (Tazewell County)** - In 1978, Spring Lake was divided into two distinct waters for the purpose of capital improvement and the restructuring of the fish population. Prior to 1916, Spring Lake was part of the Illinois River system as a lateral freshwater marsh. In 1916 it was separated from the river by a high levee and has remained a separate body of water. From 1916 until 1981, the quality of the fishery habitat and the fish population declined due to rough fish populations such as carp and bullheads. In 1986 the lake was treated with rotenone to remove the existing fish population and encourage the growth of aquatic vegetation. The key to the rehabilitation was the re-establishment of lush aquatic vegetation which had occurred by summer of 1986.

Always a shallow water lake, South Spring Lake today has an average depth of 2.9 feet. Of the 610 acres of water, at least 75 percent is covered with 13 different species of aquatic vegetation by late May of each year. The tremendous spring recharge from the bed of the lake amounts to 100 acre feet a day, creating very cold water temperatures under the insulating layer of vegetation for the majority of the summer months. This is a unique situation and only occurs in Spring Lake within the State of Illinois. The resulting temperature regime and water quality is excellent habitat for pike.

Because of its' proximity to the Jake Wolf Hatchery, South Spring Lake has been used as a brood source for northern pike the past seven years and has provided most of the early northern stocks for statewide stocking of northern pike and tiger pike each year. In an effort to collect fish for egg production, extensive population assessment data has been gathered since 1994. We know quite a lot about the size structure and age of the population as well as growth. It appears that growth of female fish is excellent when compared to nation-wide populations. Growth of male northern is in the normal range when making a similar comparison. There is a big difference in the length at age between sexes! A 28 inch female is usually 4 years old, whereas a 25 inch male is 5

years old, on average. In 2008, we were able to collect 134 fish in 20 net nights of effort. From those fish we were able to spawn 98 females at Jake wolf Hatchery. A total of 844,000 eggs were produced, resulting in 295,000 fry. These fish were the source for state-wide stockings of northern pike in 2008.

Fishing for northern pike on South Spring Lake is a challenge. The water temperatures rise quickly and usually result in fish feeding actively in early March. Aquatic vegetation becomes thick and hard to fish no later than May 15th of each year and lasts until the lake closes for regular waterfowl season. The narrow window of fishing opportunity between the first of March and mid-May results in some excellent catches of northern pike. The fish are then refuged by the thick vegetation until the following year. Sometimes fishing the holes in the vegetation in June is quite effective. There are a number of large fish in the population available to northern fishermen. Based on the size structure of the fish sampled during the spring of each year, it may be possible to catch northern up to 20 pounds in weight. Large white or yellow spinner baits are among the best choices early in the year with many larger fish caught by surface plugs and jerk baits later in the spring! A number of fish are caught in the winter in the large spring area located at the south end of the lake. State-wide regulations apply to the northern pike fishery at Spring Lake.

South Spring Lake has one boat ramp and is accessible by the Manito Blacktop, 12 miles South of Pekin. No fuel or services are available; however, camping and food service are both located on the facility. There is a 25 horsepower limit at Spring Lake. The lake is closed to fishing north of Pike Hole Bridge during the waterfowl season each year.

## **STATUS OF NORTHERN PIKE FISHERY IN ILLINOIS REGION 2**

### **DISTRICT 6: DUPAGE, KANE, AND MCHENRY COUNTIES**

**McCULLOM LAKE** - This shallow lake receives an annual supplemental stocking of about 750 late-summer fingerlings (about 8 in. long) from the State hatchery system. Consistent stocking over the past 10 years and harvest regulations (i.e., 24 in. minimum length limit and 3 fish daily creel limit) have helped to create an excellent northern pike fishery at McCullom Lake. Trap nets set during March 2007 captured 167 northern pike that ranged in length from 14 to 32 in. long. Most of the sampled fish (86%) were between 20 and 28 in., and a high proportion of them (36%) were over the legal limit. Big pike also can be found in this lake. One individual from this survey was 32 in. long and 10 lbs. and another caught in fall 2004 was 38 in. long and 13 lb. Late ice during spring 2008 pushed the trap net survey back to April. The later sampling date resulted in a catch of only 2 pike/net day compared to catches of 10-28 pike per net day in previous years.

Access at the lake is limited to shoreline fishing at several small parks and one small, undeveloped boat ramp. Outboard motors are limited to 9.9 horsepower. The lake is moderate in size (244 acres) and shallow (average depth = 5.3 ft.). Try targeting the

lily pads on the north and west end of the lake for northern pike. A handicap-accessible fishing pier is available in Petersen Park on the lake's northeastern shoreline. Ice fishing is very popular here, in part, because of improved access on the ice. There is an aerator that runs periodically during winter so beware of open water and areas of thin ice.

**DEFIANCE LAKE** - Located in a beautiful natural setting in Moraine Hills State Park, Defiance Lake is particularly popular with northern pike anglers and ice fishermen. Shoreline fishing is limited during summer due to dense shoreline vegetation and abundant submersed plants in shallow areas around fishing piers. Vegetation treatment is not an option due to the presence of State endangered and threatened plants. Boat rental is available through a concessionaire and electric trolling motors are allowed at the lake; gasoline motors are not allowed. Anglers now may launch their own canoes and kayaks for fishing. Check with the park office (815-385-1624) for the most current access information.

The northern pike fishery in this 48-acre natural glacial lake remains stable. We captured 17 pike during a March 2006 trap netting survey (8.5 fish/net-day) and 13 pike during a spring 2008 electrofishing survey. Fish from numerous size groups were represented in these samples and over 30% of the catch in each year was longer than the minimum size limit. The largest pike captured was a 28-in. long female that weighed 5.0 lbs. The Defiance Lake pike fishery is maintained through the annual stocking of about 150 late-summer fingerlings provided by the State hatchery system. Harvest regulations include a 24 in. minimum length limit and a 3 fish daily creel limit.

## **DISTRICT 7: LAKE COUNTY**

**FOX CHAIN O'LAKES** - Northern pike are native to the Fox Chain system and maintain themselves through natural reproduction. Population data are restricted to fish collected in spring trap nets. Fish collected are almost always mature individuals from 28" to 36" long and caught in a post spawn condition by late March. The IDNR rarely collects northern pike outside of their early spring netting but ice fishermen report catches relatively commonly. The future success of this fishery depends on protecting wetlands adjacent to lakes and rivers in the drainage which encompasses an area of approximately 1,280 square miles above the Stratton Lock and Dam in McHenry. There is a high likelihood that northern pike "run" up streams, creeks, and drainage ditches in the spring in search of spawning habitat. Spring floods in 2007 and 2008 may benefit reproduction and thus the population. In 2010 and 2011 we should be able to detect if reproduction was successful.

**DIAMOND LAKE** - This 149.0 acre lake is managed Cooperatively with the Mundelein Park District. The lake receives annual stockings of northern pike to balance this urban glacial lake's fishery. The average size fish collected in 2003 was 21 inches (n = 4), one 28" fish was collected in 2006 and one 21" fish in 2008. Fishermen report some success catching northern pike, ice fishermen are the most successful. Northern's are stocked to diversify the predator base and help control abundant yellow bass and crappie populations. Yellow bass have been shown to hurt populations of fish that nest

like bluegill, crappie, and largemouth bass. All yellow bass caught should be harvested to reduce their abundance. Open water access is limited to a Park District boat launch but ice fishing opportunities are more available. Diamond Lake offers the potential for larger size fish since it has a variety of different vegetation types, relatively nice water quality, and some deeper water.

## **DISTRICT 8: COOK COUNTY**

**WOLF LAKE** - This 390 acre urban lake sits on the Illinois - Indiana border and offers a considerable amount of shoreline fishing. In June of 2002, a northern pike caught during a survey was 35 inches and 12.3 pounds, in spring 2008 an ice fishermen caught a 27 pounder which exceeded everyone's imagination. Wolf Lake was added to the northern pike supplemental stocking list in 2003 after being off the list for several years to enhance the population and add predatory pressure to the system. Vegetation gets thick in summer since Eurasian milfoil (an exotic species) became established and extra predation is needed to control an abundant bluegill population. Statewide limits apply to northern pike on Wolf Lake (3 fish per day, 24" minimum length). Wolf Lake is a "2 pole and line only" lake to limit the use of un-attended fishing gear. Wolf Lake is stocked with approximately 1,200 fingerlings annually.

**TAMPIER LAKE** - This 160 acre urban lake provides anglers with some nice angling opportunities. Small boats (electric motors only, no gas motors attached) are allowed, boat rentals are available and multiple parking lots provide access to a fisherman friendly shoreline. The lake has a population of gizzard shad as the primary forage so "catching" is probably tougher than "fishing", but the fish are there and some nice size northern pike are caught each year. Approximately 360 northern pike are stocked annually to diversify the predator population and provide sportfishing opportunities. Pike have been collected in both the marsh north of 131<sup>st</sup> and south in the main lake so either portion could hold your next catch.

**BUSSE LAKE (South Pool)** - This 146 acre lake is part of a larger multi-lake system that offers shore anglers and small boat anglers (electric motors only, no gas motors attached) access to an urban esocid fishery. Northern pike to 34 inches have been collected by IDNR and Cook County Forest Preserve District Fisheries staff. The South Pool is supplementally stocked with 415 northern pike annually to maintain their population. The Main Pool is stocked with muskie so anglers truly have a species choice; northern pike in one Pool and muskie in the Main. Fish "run" up the creek system in spring and utilize the lakes extensive shallow areas. Some pike likely move over the spillway and into the Main Pool so chances are there will always be a few northern pike in the Main Pool and Salt Creek. Busse Lake has a 3 fish per day, 24" length limit for northern pike.

**SKOKIE LAGOONS** - This 190 acre lake system contains 7 connected lagoons. It offers both small boat (electric motors only, no gas motors attached) and shore fishing access. The system has an excellent multi-species fishery and northern pike are part of the equation. Gizzard shad provide a strong forage base but can make fishing tough

because food is so plentiful. Regulations on Skokie Lagoons are 3 fish per day and a 24" length limit. It is stocked with approximately 1,100 fingerlings annually.

## **DISTRICT 9: GRUNDY, KENDALL, WILL, AND KANKAKEE COUNTIES**

**MAZONIA STATE FISH AND WILDLIFE AREA** - Located in Grundy and Kankakee Counties, this reclaimed strip-mine area contains water bodies ranging in size from 0.1 to 150 acres in size. The current state record northern pike was caught from Monster Lake, Mazonia South Unit, in 1989. Northern pike have been supplementally stocked into Mazonia Lake #8 (18.7 acres) and Lake #9 (35.5 acres). These lakes are actually joined by a small channel which allows for movement of fish, and fishermen, from one lake to another. The stocking program was initiated in 1990 and fish have been released at low densities on a more-or-less annual basis since that time. For the past three years northern pike fingerlings have been reared to a larger size at an on-site facility and released at an average length of 13 inches. This added length will hopefully equate to improved recruitment of this species. Ice-out trap netting and biennial spring surveys have yielded poor returns and recruitment of stocked fish is surmised to be fairly low. Boat access is available at several of the larger lakes at the Mazonia Main Unit, with propulsion limited to electric trolling motors. The Mazonia South Unit contains several large lakes ranging from 50 to 150 acres and as such gas-powered outboards (no horsepower limit) will be permitted. Gravel boat ramps are available at Monster (where the present state-record northern pike was caught), Ponderosa and Eagle Lakes only. Northern pike have recently been stocked into Ponderosa Lake (148.9 acres). Although anglers have reported catching pike from the South Unit lakes, IDNR surveys have failed to substantiate these claims. With the exception of Monster Lake which offers year 'round fishing opportunity, Mazonia is closed to fishing during upland game and waterfowl season. Following the completion of the hunting seasons, Mazonia reopens for ice fishing dependent upon ice conditions.

**LAKE MILLIKEN** - Located within the Des Plaines Conservation Area in Will County near Wilmington, this 26 acre lake has received northern pike fingerlings annually since 1998. The 2008 fall survey, which consisted of 90 minutes of electrofishing, two gill nets and four trap nets, failed to collect a single pike. The spring trap net survey in 2006 yielded a collection of 7 northern ranging in length from 526mm/20.7" to 645mm/25.4" averaging 56mm/22.4". Recruitment of stocked fish is impacted by predation of stocked fish by largemouth bass while the long-term survival of this fish is compromised by the lack of depth in this lake (maximum of eight feet). While IDNR surveys have failed to produce any numbers of fish or fish of large size, site reports indicate that occasionally anglers catch fish in excess of 36 inches. Lake Milliken is open to fishing year 'round from 6:00 a.m. until sunset. Boats are not allowed.

## STATUS OF NORTHERN PIKE FISHERY IN ILLINOIS REGION 5

### DISTRICT 21: ALEXANDER, JACKSON, PERRY, PULASKI, AND UNION COUNTIES

**MALLARD LAKE** - This 75 acre strip cut is located in the Denmark Area of Pyramid State Park in Perry County. This lake has a concrete boat ramp and a 10 HP motor limit. Northern pike have been stocked in this lake in 2002, 2003, 2004, 2006 and 2008. Another stocking is scheduled for 2010. Because of the difficulty sampling northern pike in this Lake, no additional information is available for this pike fishery. Another attempt to sample northern pike in this lake will be made in the spring of 2009.

**BLUE WING LAKE** - This 35 acre strip cut is located in the Denmark Area of Pyramid State Park in Perry County. This lake has a concrete boat ramp and a 10 HP motor limit. Northern pike have been stocked in this lake in 2002, 2003, 2004, 2006, and 2008. Another stocking is scheduled for 2010. Because of the difficulty sampling northern pike in this Lake, no additional information is available for this pike fishery. An attempt to sample northern pike in this lake will be made in the spring of 2009.

## STATUS OF NORTHERN PIKE FISHERY IN ILLINOIS RIVERS

**FOX RIVER** - No Northern Pike were collected in 2003 during 6 hours of electrofishing at locations from the State Line to Wedron. Lack of spawning habitat (except in the upper river and Chain-O-Lakes), the presence of many dams, and competition from muskie, may be limiting factors

**DES PLAINES RIVER** - This low gradient river, with associated wetland and backwater areas, historically provided excellent habitat for pike. Although degraded for many years, recent water quality improvements have allowed limited recovery of northern pike in some areas of the river although at relatively low abundance. In 2003, sampling was conducted at 17 stations from the Wisconsin State Line to Joliet. Northern pike were found at Daniel Wright Woods in Lake County, Dam # 2, Dempster Avenue and Lyons. A total of 6 fish were collected, ranging from 18-25 inches. In 2004 samples were taken at Riverside and Hodgkins, both producing northern pike at a catch rate of 4-5 per hour. Fish ranged in size from 13 up to 29 inches in length. Anglers have also been catching northern pike, particularly in the spring in the area around Riverside, where sizes in the 20-30 inch range are not uncommon.

**KANKAKEE/IROQUOIS RIVERS** - Northern pike is a difficult species to collect in rivers. Surveys have noticed an apparent increase in the incidental take of northern pike, and anglers appear to be catching more of them in recent years. The regulation on northern pike remains at 3 per day and they must be 24 inches or longer.